

## REMARKS

Claims 1 and 3-23 are pending in the application. Claims 1, 3, 9, 11 and 16 are currently amended. Claim 2 is cancelled. Applicants respectfully request for allowance of all the pending claims.

### Rejections under 35 U.S.C. §103

#### **Claims 1 and 14-15**

Claims 1 and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,942,019 to Goodell et al. (hereinafter referred to as “the ‘019 patent”) in view of U.S. Patent No. 4,137,012 to Porta et al. (hereinafter referred to as “the ‘012 patent”).

Independent claim 1, as amended, comprises “*means for vaporizing the source of the getter material,*” which was originally set forth in the now-cancelled claim 2. As acknowledged by Examiner in the Office Action, neither Goodell nor Porta discloses a purifier with means for vaporizing the source of getter material. *See, page 4, lines 19-21.*

In rejecting claim 2, Examiner asserts that U.S. Patent No. 3,620,645 to Porta et al. (hereinafter referred to as “the ‘645 patent”) would have rendered it obvious for a person skilled in the art to modify the teaching in the ‘645 patent in order to provide the means for vaporizing the source of the getter material. *See, page 5, lines 1-8.* However, Applicants respectfully disagree with the assertion.

The ‘645 patent discloses that barium or barium containing alloys are unsuitable for use as the sole getter metal because they are evaporative rather than non-vaporative. *See, col. 4, lines 32-38.* It is clear that the ‘645 patent deems non-vaporative materials

more desirable than vaporative materials in constructing a getter metal. It, in fact, teaches away from the means for vaporizing the source of the getter material as described in the claimed invention.

Moreover, it would not have been obvious for a person skilled in the art to modify the '012 patent in combination with the '645 patent in order to provide the means for vaporizing the source of the getter material. In the '012 patent, a non-vaporable getter metal is coated on substrates 46 and 48. *See, col. 5, lines 11-17.* It is essential in the context of the '012 patent that the getter metal is non-vaporable, because it provides no necessary design that could have made usage of a vaporable material possible. An example of such design can be an arch discharge device that provides an electrical field forcing vaporized getter metal to move in a predetermined direction. Without such design, any vaporized getter metal can contaminate a pump, instead of purifying it.

Thus, independent claim 1, as amended, is patentable over the '019 patent in view of the '012 and '645 patents under section 103. Accordingly, claims 14 and 15 that depend on claim 1 and include all the limitations set forth therein are patentable over the cited reference as well.

### **Claims 2-13**

Claims 2-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over the '019, '012 and '645 patents and further in view of U.S. Patent No. 3,399,052 to Bobo (hereinafter referred to as "the '052 patent"), U.S. Patent No. 3,167,678 to Griessel (hereinafter referred to as "the '678 patent"), and U.S. Patent No. 3,593,495 to Ellison (hereinafter referred to as "the '495 patent").

Claim 2 has been cancelled, and rewritten into independent claim 1. As claims 3-13 depend from independent claim 1 and include all the limitations set forth therein, they are patentable over the cited references under section 103.

**Claims 16-23**

Claims 16-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over the '019, '012, '645, '495, and '678 patents as well as U.S. Patent No. 5,911,560 to Krueger et al.

Independent claim 16 includes "means for applying an electric potential across the source of the getter material and the housing, thereby *vaporizing the source of the getter material* to refresh the coating of getter material on the at least one baffle." As discussed above none of the cited references discloses such limitation either standing alone or in combination. Thus, claim 16 is patentable under section 103.

Accordingly, claims 17-23 that depend from claim 16 and include all the limitations set forth therein are patentable over the cited reference as well.

### CONCLUSION

Applicants have made an earnest attempt to place this application in an allowable form. In view of the foregoing remarks, it is respectfully submitted that the pending claims are drawn to a novel subject matter, patentably distinguishable over the prior art of record. Examiner is therefore, respectfully requested to reconsider and withdraw the outstanding rejections.

Should Examiner deem that any further clarification is desirable, Examiner is invited to telephone the undersigned at the below listed telephone number.

Applicants do not believe that any additional fee is due, but as a precaution, the Commissioner is hereby authorized to charge any additional fee to deposit account number 50-4244.

Respectfully submitted,

By: /Ting-Mao Chao/  
Ting-Mao Chao  
Attorney for Applicant  
Registration No. 60,126

Edwards Vacuum, Inc.  
Legal Service – Intellectual Property  
2041 Mission College Blvd. Suite 260  
Santa Clara, CA 95054

TEL: 1-408-496-1177  
FAX: 1-408-496-1188

Customer No.: 71134